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Product Information

Anti-Human IgG (γ-chain specific)−Peroxidase antibody produced in goat
IgG fraction of antiserum, buffered aqueous solution

Catalog Number **A8419**

Product Description

Anti-Human IgG (γ-chain specific) is produced in goat using purified human IgG as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other goat serum proteins. Goat anti-human IgG is then conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde.

Specificity for the γ-chain of human IgG is determined by Ouchterlony Double Diffusion (ODD) and immuno-electrophoresis (IEP). The antibody preparation is specific for human IgG when tested against purified human IgA, IgG, IgM, Bence Jones kappa, and Bence Jones lambda myeloma proteins.

Identity and purity of the antibody is established by immunoelectrophoresis prior to conjugation. Electro-phoresis of the product followed by diffusion against the anti-goat IgG and the anti-goat whole serum results in single arcs of precipitation in the gamma region.

Reagents

Solution in 0.01 M phosphate buffered saline pH 7.4, containing 0.05% MIT.

Antibody concentration:10-20 mg/ml

Molar Ratio: 0.6-1.5

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

ELISA: A minimum titer of 1:40,000 is determined by direct ELISA. Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C.[1]

Microtiter plates are coated with purified human IgG at a concentration of 5 μg/ml in 0.05 M carbonate-bicarbonate buffer, pH 9.6.
Carbonate-Bicarbonate Buffer capsules are available as Catalog No. C3041.

Substrate: *o*-Phenylenediamine dihydrochloride (OPD), Catalog No. P8287, 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate.
Phosphate-Citrate Buffer with Sodium Perborate capsules are available as Catalog No. P4922.

Dot Blot: a minimum dilution of 1:100,000 is determined in a direct chemiluminescence assay using 10 ng human IgG/dot. Luminol plus enhancer was used as substrate.

Immunohistology: a minimum dilution of 1:100 is determined in a direct assay using formalin-fixed, paraffin-embedded human tonsil sections.

Note: Working dilutions should be determined by titration assay. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet U.S.D.A. requirements.

References

1. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

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